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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/328,484	06/09/1999	HIDEAKI FUNAKOSHI	3064NG/47927	6889

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CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER	
BROWN, RUEBEN M	

ART UNIT	PAPER NUMBER
2611	11

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/328,484	FUNAKOSHI, HIDEAKI	
	Examiner	Art Unit	
	Reuben M. Brown	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *3,7 and 8* is/are allowed.

6)☒ Claim(s) *1 and 4-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/8/2003 have been fully considered but they are not persuasive. Examiner agrees with applicant's general characterization of Birch, that the reference detects whether a received video signal is HDTV (as opposed to a SDTV format) and outputs an indication to confirm such a detection, which reads on the corresponding subject matter recited in the claims. Applicant argues on page 10 that the distinction between the present invention and Birch is that the present invention outputs a "predetermined packet ID".

First of all, examiner points out that claim 1 recites a "predetermined packet ID", whereas applicant argues on page 10 with respect to a "predetermined ID packet". Thus, it is unclear whether the applicant is arguing that the two terms are interchangeable. It appears to the examiner, that the terms a "predetermined packet ID" and "predetermined ID packet" are not necessarily interchangeable. Secondly, it is noted that the claim does not specify the origin or the nature of the "predetermined packet ID". Furthermore, the claim does not specify to where the "predetermined packet ID" is output. Applicant makes the case that in the present invention; the "predetermined packet ID" contains information corresponding to the sub-channel held by storage unit 38, however such a limitation is not recited in claims 1, 5 & 6.

Examiner asserts that the claimed "predetermined packet ID" is broad enough to read on the actual packet ID of the HDTV signals that are presented to the user. In other words, it is predetermined that when an HDTV signal is detected, that the receiver system at least outputs the HDTV packets, and thus their corresponding packet ID as well, to the display system; see Fig. 6A & col. 27, lines 35-40. For instance, Birch discloses that normally HDTV signals are handled as a re-assigned video service because they are processed (and therefore routed to) a video processor other than the video processor 630, col. 27, lines 50-59. Therefore the HDTV packets, which necessarily include packet identifiers, are routed to another video processor, and thus Birch meets the claimed feature of outputting a predetermined packet ID.

Furthermore, the claimed feature of outputting a predetermined packet ID, also reads on the discussion in Birch that the Demux circuit 612 expects to receive packets in a certain order, including the video control, i.e., VCP packets and the video service descriptors, i.e., VSDP packets, col. 20, lines 45-60. The VSDP includes a packet header that identifies it as video data, by which the Demux 612 identifies the packet as such, col. 22, lines 51-67. Birch goes on to disclose that the VSDP's are outputted; again the VSDP's include a packet ID.

Moreover, as pointed by the applicant on page 10, the HDTV output flag disclosed in Birch, corresponds to the packet ID of the present invention that is used to determine whether video is HDTV or SDTV. Thus, examiner contends that this HDTV flag may itself be considered as a predetermined packet ID output by the Demux 612, when an HDTV signal is detected. In other words the HDTV flag represents its corresponding packet, and is in effect a "packet ID".

In view of the above discussions, examiner maintains all rejections of record.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 & 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Birch, (U.S. Pat # 5,583,562).

Considering claim 1, the claimed digital broadcasting receiver comprising a transport unit for separating/dividing a demodulated digital broadcast signal reads on the operation of the demultiplexor 156 in Birch, which receives a demodulated signal from the demodulator 154, see Fig. 1 & col. 5, lines 49-51. The claimed feature of detecting one of a one-channel or mutli-channel broadcast based on a packet ID included in the digital broadcast signal is met by the receiver's detection of the HDTV flag. Birch teaches that the packet header includes a code, which identifies video services, and an additional HDTV flag is also set in order to identify a video stream as being of HDTV format, col. 11, lines 15-45; col. 22, lines 51-65; col. 23, lines 1-6 & Fig. 12B.

As for the additionally claimed feature of a sub-channel control unit that outputs a broadcast signal with a predetermined packet ID when the detected result indicates multi-channel broadcasting, the recitation reads on the disclosure of Birch, see col. 5, lines 56-61; col. 22, lines 51-67 & col. 27, lines 35-59.

Considering claim 4, the claimed outputting the OSD of the sub-channel of the broadcasting signal is broad enough to read on actually outputting the video signal itself, which is inherently how Birch operates, see col. 5, lines 56-58 & col. 6, lines 11-15.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5 & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birch.

Considering claims 5-6, the claimed method of controlling a digital broadcasting receiver includes steps that correspond with subject matter mentioned above in the rejection of claims 1 & 4, and are likewise analyzed. As for the additional step of an OSD control unit causing an

OSD to be made by superimposing data on broadcasting screen, Birch does not discuss such a feature. Nevertheless, Official Notice is taken that at the time the invention was made; superimposing data on a screen such as the channel that is currently tuned was well known in the art. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Birch with the known technique of superimposing information, such the channel tuned onto a TV screen for the beneficial purpose of providing the viewer with useful additional information with respect to the currently tuned TV program.

As for claim 6, the newly added claim calls for a computer software product for performing the method steps recited in claim 5. Birch does not explicitly show that the receiver system 150 is computerized. Official Notice is taken that at the time the invention was made, it was well known in the art to include in a subscriber terminal, such as a set-top box, a microprocessor being controlled by computer software stored in memory, such as ROM. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Birch with the very well known feature of a microprocessor being controlled by computer software, at least for the desirable improvement of a more dynamic equipment which can be programmed to provide various features to different subscribers.

Allowable Subject Matter

6. Claims 3, 7 & 8 are allowable over prior art of record.

Considering claims 7 & 8, the prior art of record does not teach or fairly suggest the claimed features comprising a setting unit for setting a sub-channel to be initially displayed when the one-channel broadcasting is switched to multi-channel broadcasting, a recording unit for holding the sub-channel set via the setting unit, such that that the sub-channel control unit controls the transport unit so that when a multi-channel broadcasting signal is detected, a packet ID corresponding to the sub-channel held in the recording unit is outputted. Claim 3 depends from claim 7, and is likewise allowable for at least the same reasons.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:
(703) 872-9314, (for formal communications intended for entry)
Or:
(703) 746-6861 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399. The examiner can normally be reached on M-F (8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9314 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown

VIVEK SRIVASTAVA
PRIMARY EXAMINER